REMARKS

Claims 1-28 are pending in the present application. Claims 1, 9, and 19 are independent.

Amendment of Drawings

Applicants believe that amendments to the Figure 1 render this rejection moot. Applicants respectfully request the Examiner to withdraw the 37 CFR 1.84(c) rejection.

Abstract

The abstract has been revised to less than 150 words as requested by the Examiner.

Informalities

Pages 6 and 8 of the specification have been amended to eliminate the informalities noted by the Examiner.

Claim Objection

Claim 28 has been amended as suggested by the Examiner.

37 CFR 1.84(p)(5) Rejection

Applicants believe that amendments to the specification render this rejection moot. Applicants respectfully request the Examiner to withdraw the 37 CFR 1.84(p)(5) rejection.

Embodiment of the Invention

The Applicant respectfully provides the Examiner with a summary of an embodiment of the present invention. Referring to Fig. 3 and 4, and page 5, lines 14 through page 8, line 18 of the specification, a method of frequency hopping in a synchronized TDMA wireless communications system is disclosed. A base station 20 makes signal strength measurements at a first sampling rate during an idle time slot 32 as shown in step S10. A weighted average is then sampled over the first period of time to obtain an received signal strength indicator (RSSI). Then, in step S15, the available uplink frequencies are ordered by increasing RSSI value in a long list 34. Several of the uplink frequencies at the top of the list 34 are selected to creates a short list 36 (shown in step S20). Next, the base station 20 determines the RSSI values, which are based on received signal strength (RSS) measurements at a second sampling rate, for the uplink frequencies in the short list 36 (shown in step S25). The base station 20 orders the frequencies in the short list 36 by increasing RSSI values of the short list 36, which is illustrated in step S30. Next, in step S35, the frequencies in the short list 36 are divided into groups, which include 3-4 frequencies.

When the time slot 32 serves a communication channel between the base station 20 and a mobile station 10, communication between the mobile station 10 and the base station 20 is established and the base station measures the carrier power of the signal received from the base station (Step S50). The base station 20 then calculates the carrier-to-interference ratio for each of the frequencies in the short list 36 of the time slot 32 using the measured carrier power and the RSSI values for the frequencies (Step S55). In step S60, the base station 20 determines the frequency groups in the short list 36 that satisfy the CIR requirements for the mobile station 10. The selected frequency groups are then used for perform frequency hopping.

Rejection Under 35 U.S.C. § 102 (b)

Claims 1-28 stand rejected under 35 U.S.C. § 102 (b) as being anticipated by Almgren. Applicant respectfully traverses this art grounds of rejection.

Referring to col. 5, line 58 trough col. 6, line 15, Almgren teaches a method of allocating channels to different connections between a base station and a mobile station. The quality of the channels or frequencies are observed in the connections between the base stations and mobile station. Almgren uses the channel quality to indicate "the extent to which a channel or frequency is disturbed by interference." A channel quality parameter is determined for each channel when the generation interval is a time slot in a TDMA system. Then, the channels/frequencies are ordered based on the channel quality parameters. Finally, the channel hopping sequences are generated such that each channel hopping sequences utilizes a channel taken from a respective channel list.

The Examiner asserts that in Col. 6, lines 51-55, Almgren discloses a second measurement of interference. In this passage, Almgren states that an "advantage is that the quality of the channels included in a channel hopping sequence is determined at the different time interval in a channel hopping sequence." Nowhere in the passage does Almgren disclose or suggest a "**second measuring, for the idle time slot**, interference for a second period at a second rate on the frequencies in the first list" as recited in claim 1.

Independent claims 9 and 19 include similar limitation to claim 1; and therefore, are patentable at least for the reasons stated above with respect to claim 1.

Claims 2-8, 10-18, and 20-28, dependent on claims 1, 9, and 19, are patentable for the reasons stated above with respect to claims 1, 9, and 19 as well as on their own merits.

Applicant respectfully requests that the Examiner withdraw this art grounds of rejection.

CONCLUSION

In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Gary Yacura at (703) 668-8023 in the Washington, D.C. area, to discuss the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. 1.16 or under 37 C.F.R. 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C.

By: _____

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AMENDMENTS TO THE DRAWINGS

The attached sheet of Drawings includes changes to Figure 1. This sheet, which includes Figure 1 and Figure 2, replaces the original sheet including Figures 1 and 2.

Attachment: Replacement Sheet